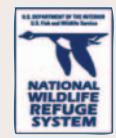
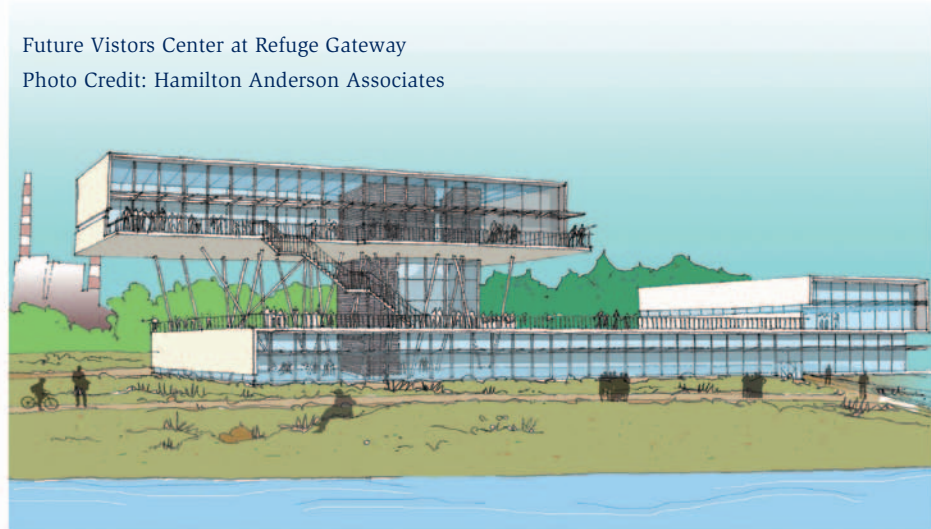


2006

Annual Progress

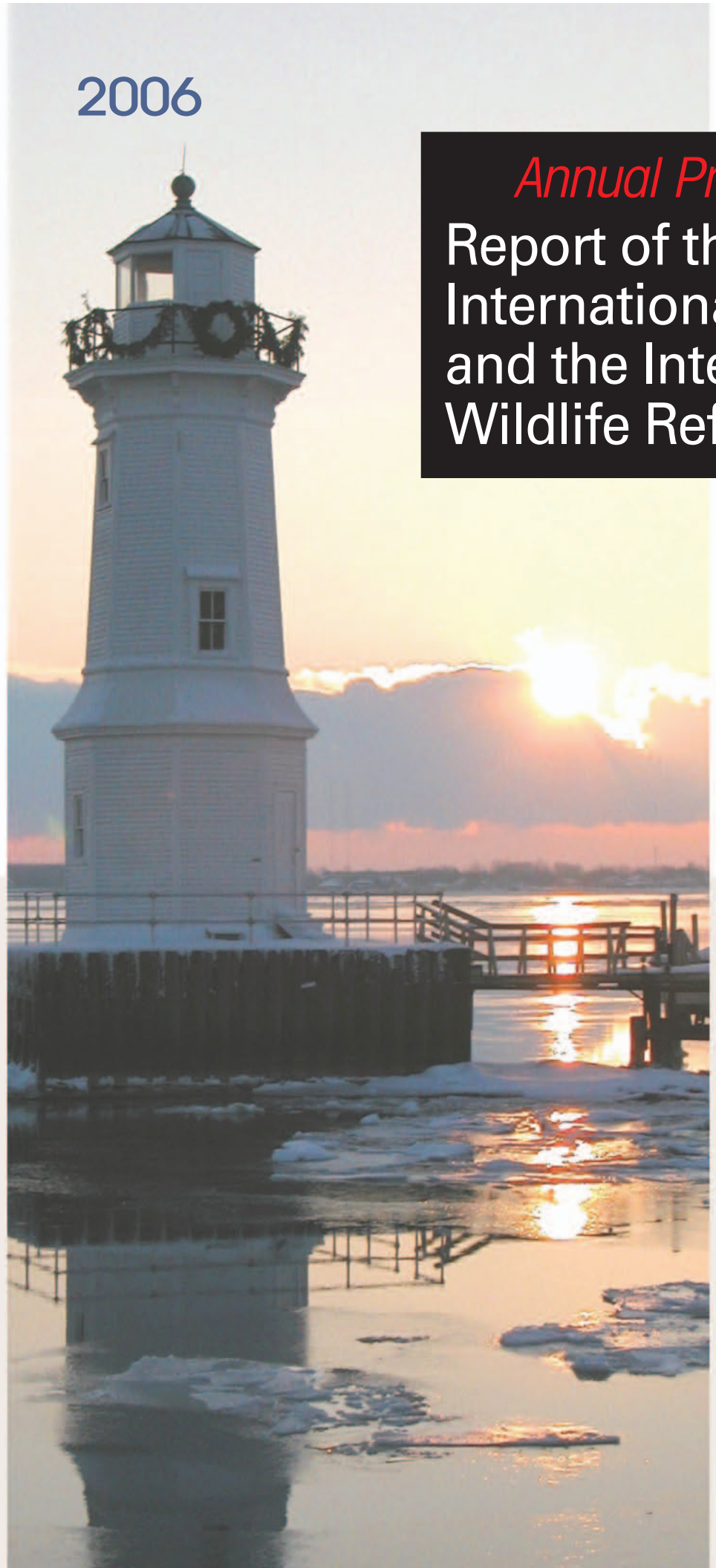
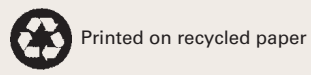
Report of the Detroit River
International Wildlife Refuge
and the International
Wildlife Refuge Alliance

Future Vistors Center at Refuge Gateway
Photo Credit: Hamilton Anderson Associates



Major IWR Alliance funding partners in 2006 included
DTE Energy Foundation, BASF Corporation, DaimlerChrysler,
General Motors Corporation, Hamilton Anderson Associates,
ITC Transmission, Praxair, and Wade Trim.

Discover Our Wild Side



Building Our
International Wildlife
Refuge
in the
Industrial
Heartland

BUILDING OUR REFUGE – 2006

“There is no chance, no destiny, no fate, that can circumvent or hinder or control the firm resolve of a determined soul.”

By Ella Wheeler Wilcox

The Detroit River International Wildlife Refuge has proven to be a national leader in public-private partnerships as it continues to grow and expand. As you will read in this Annual Report, much has been accomplished through partnerships with corporations, nonprofit organizations, conservation groups, communities, and foundations. Indeed, it is only through these partnerships that the refuge has been able to preserve 4,985 acres of land for wildlife, complete over 25 soft shore engineering projects along the Detroit River shoreline, and leverage over \$11 million in conservation projects - all in the last five years.

What we are creating is a new paradigm of conservation that combines citizen passion with resources from governments, businesses, and foundations to further conservation, improve quality of life, and ensure competitive advantage in the future.

I am so heartened that we are truly creating an exceptional outdoor recreational and conservation experience for over six million people in our watershed and many, many annual visitors.



John Dingell, Member of Congress,
15th District Michigan

I challenge each of you to continue to foster this new paradigm of conservation that will truly leave a lasting legacy for generations to come. My hope is that our children and grandchildren will look back and see your farsightedness and dedication to creating and expanding North America's only International Wildlife Refuge.

With best wishes,

A handwritten signature in black ink that reads "John D. Dingell".

John D. Dingell
Member of Congress

Cover Photo Credit: Emily Wilke

Introduction

The Detroit River and western Lake Erie form a unique linkage between the upper Great Lakes and the lower Great Lakes. Stretching along 48 miles of Detroit River and western Lake Erie shoreline is a unique necklace of island, coastal wetland, shoal, and upland habitats that makes up the Detroit River International Wildlife Refuge (IWR). Since the creation of the IWR in December 2001, it has grown from 304 acres to 4,985 acres in 2006. This IWR growth has been accomplished by unique public-private partnerships for conservation, sustainability, and close-to-home outdoor recreation. Indeed, this region is rapidly gaining an international reputation for public-private partnerships that protect wildlife, provide exceptional outdoor recreational opportunities, enhance ecotourism, and help businesses attract and retain the next generation of employees.

The Detroit River and western Lake Erie are at the intersection of two major North American flyways – the Atlantic and Mississippi. Over 300,000 diving ducks, 75,000 shorebirds, and hundreds of thousands of landbirds and fall raptors frequent the area to rest, nest, and feed along the unique shoreline habitats, including many islands and marshes. Over 30 species of waterfowl, 23 species of raptors, 31 species of shorebirds, and 160 species of songbirds are found along or migrate through this corridor. In addition, 117 species of fish are found in or migrate through the Detroit River. This biodiversity and the diversity of habitats to support these biota have given the region international acclaim. The Detroit River and western Lake Erie

Erie Marsh – How it all began . . . and today



Erie Marsh
Photo Credit: Richard Baumer

Imagine the sounds of millions of waterfowl, shorebirds, raptors, and land birds, all as they pass through the crossroads of the Mississippi and Atlantic flyways. This flyway crossroads is where the Erie Shooting & Fishing Club was founded in 1870. A group of avid hunters and fishermen banded together to preserve Erie Marsh, located just north of the Ohio border in Michigan on the western basin of Lake Erie. Originally, a person had to donate land to become a member. In the 1970s members became concerned about sprawl impacting Erie Marsh and donated it to The Nature Conservancy to help ensure long-term conservation. Today, the 2,217-acre Erie Marsh Preserve represents 11% of the remaining marshland in southeast Michigan. This Great Lakes coastal ecosystem is critically important to migrating waterfowl, raptors, and shorebirds, and serves as breeding and nursery grounds of fish, plants, insects, reptiles, and amphibians.

Erie Marsh Preserve is unique in that you can see the Toledo skyline, explore natural springs bubbling year round, and discover remnants of Native American tribes. It is also a place where you find the State of Michigan's symbol of clean water – the American Lotus, a Michigan threatened species – the Eastern Fox Snake, and a Michigan "special concern species" – Swamp Rose Mallow.

The Nature Conservancy retains ownership rights, as well as a long-term lease with Erie Shooting & Fishing Club. In 2006, Erie Marsh Preserve was enrolled in the Detroit River International Wildlife Refuge – doubling the size of the refuge to 4,985 acres. In the future, The Nature Conservancy, Erie Shooting & Fishing Club, and the U.S. Fish and Wildlife Service will be seeking grant funds to manage these unique habitats and help protect wildlife for future generations.

have been recognized for their biodiversity in the North American Waterfowl Management Plan, the United Nations Convention on Biological Diversity, the Western Hemispheric Shorebird Reserve Network, and the Biodiversity

develop the next generation of conservation stewards and sustainability entrepreneurs. This annual report is a collaborative effort between the U.S. Fish and Wildlife Service and the International Wildlife Refuge

Alliance. (i.e., a non-profit alliance of organizations that builds the capacity of the U.S. Fish and Wildlife Service to deliver its mission for the Detroit River IWR). The purpose of this report is to document accomplishments during 2006, celebrate successes, and sustain the momentum for building North America's only IWR. Key IWR accomplishments are divided into four categories: habitat conservation, research and monitoring, community engagement, and capacity

building. Highlights of accomplishments are presented below for each category.

Habitat Conservation

Wetlands Restoration at Refuge Gateway: In 2006, \$1.5 million in funding was secured from the National Coastal Wetland Conservation Program, Natural Resource Damage Settlement Funds, Clean Michigan Initiative, and businesses to restore coastal wetlands at Wayne County's Refuge Gateway in Trenton. Partners include: Wayne County Parks, ITC Transmission, IVM Partners, Metropolitan Affairs Coalition, Michigan Sea Grant, International Wildlife Refuge Alliance, Michigan Department of Natural Resources and Friends of the Detroit River. Restoration is scheduled for 2007-2008.

Investment Area Program of Environment Canada and U.S. Environmental Protection Agency. And now this region has become a major source of community pride with the designation of North America's only International Wildlife Refuge.

Our Detroit River IWR story is that cooperative conservation initiatives are helping recreate gathering places for wildlife and people along the Detroit River and western Lake Erie, and that these unique conservation places are now a key factor in providing the quality of life so important in achieving competitive advantage for communities and businesses in the 21st century. Equally important is that cooperative conservation is helping provide an exceptional outdoor experience to almost six million people in the watershed. That, in turn, is helping



Michigan Department of Natural Resources Director Humphries, Congressman Dingell, Congressman Conyers, Governor Granholm, Wayne County Executive Ficano, and Refuge Manager John Hartig celebrate a \$1.5 million grant for wetland restoration at Refuge Gateway.

Photo Credit: Wyoman Mitchell

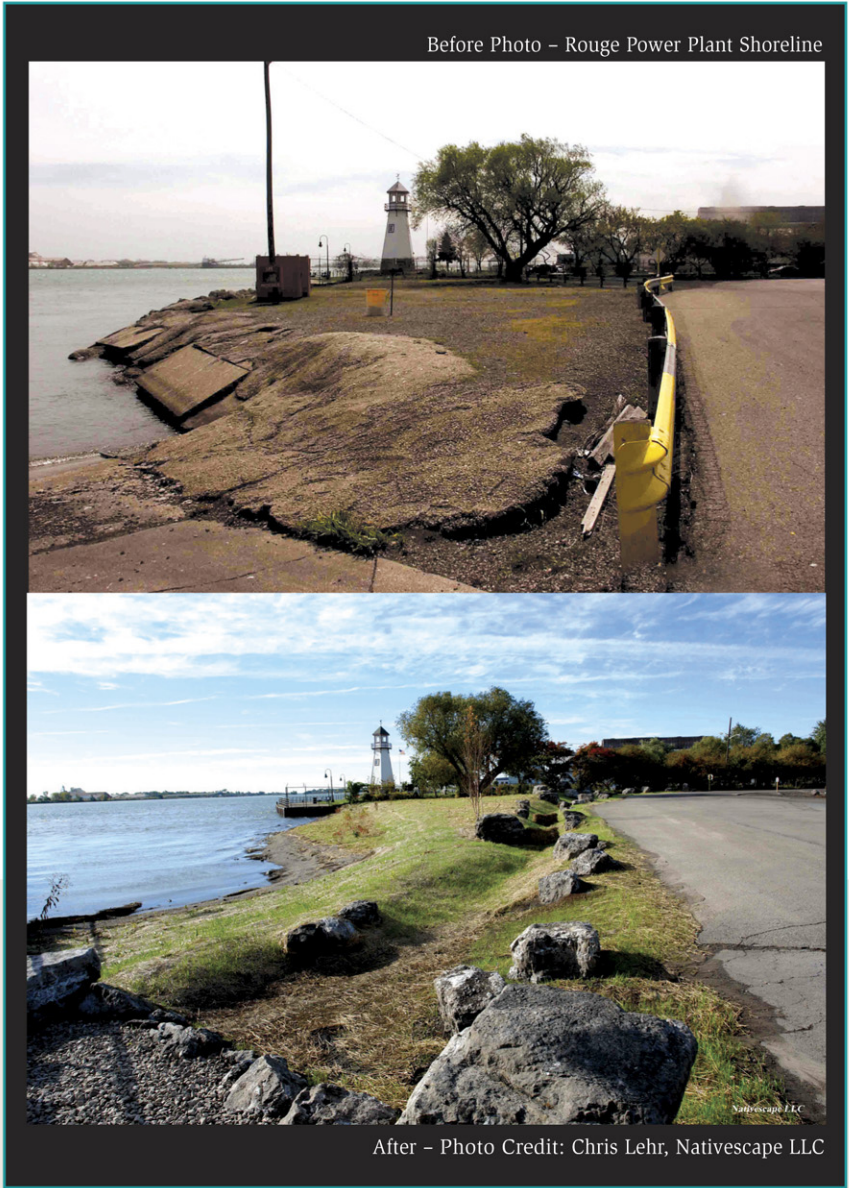
DTE Energy's Rouge Power Plant: During 2006, broken concrete was removed and a natural shoreline restored along 200 feet of the Detroit River at DTE Energy's Rouge Power Plant. Over \$50,000 in funding was secured to enhance fish and wildlife habitat and improve fishing opportunities at River Rouge's only waterfront park – Belanger Park. Partners included: DTE Energy, U.S. Fish and Wildlife Service, Michigan Sea Grant, City of River Rouge, Friends of the Detroit River, Metropolitan Affairs Coalition, Michigan Department of Environmental Quality, and Wildlife Habitat Council.

Lagoona Beach Unit at DTE Energy's Fermi 2 Power Plant: During 2006, 12 acres of grasslands were established. During 2007-2008, 15 acres of wetlands will be restored. Partners include DTE Energy, U.S. Fish and Wildlife Service, ITC Transmission, IVM Partners, Ducks Unlimited, Waterfowl USA, and the Washington Group.

DTE Energy's Monroe Power Plant: During 2006, 46 acres of grasslands were established and three acres of wetlands were restored. Partners included DTE Energy, U.S. Fish and Wildlife Service, ITC Transmission, IVM Partners, Ducks Unlimited, and the Washington Group.

Wayne County's Elizabeth Park: During 2006, \$20,000 was secured from the U.S. Fish and Wildlife Service to restore a natural shoreline along the Elizabeth Park Canal. This location is unique in that it is being developed into a kayak landing for the Detroit River

Heritage Water Trail. Partners include: Wayne County Parks, U.S. Fish and Wildlife Service, and International Wildlife Refuge Alliance.



Black Lagoon: In 2005 a \$9.3 million sediment remediation project was completed at Black Lagoon. In 2006, a \$140,000 natural shoreline restoration project was completed using soft engineering techniques. Partners included: the City of Trenton, Great Lakes Program for Soil Erosion and Sediment Control, Metropolitan Affairs Coalition, and U.S. Fish and Wildlife Service.

U.S. Steel: In 2006, U.S. Steel completed an innovative shoreline restoration project using soft engineering techniques. Approximately 2,000 feet of shoreline were restored with \$200,000 in funding. Partners in the project included: U.S. Steel, Nativescape, Michigan Department of Environmental Quality, Metropolitan Affairs Coalition, and U.S. Fish and Wildlife Service.



American Lotus
beds at Erie
Marsh
Photo Credit:
Ron Leonetti

Erie Marsh Preserve: In 2006, The Nature Conservancy signed a cooperative management agreement with the U.S. Fish and Wildlife Service to enroll the 2,217-acre Erie Marsh Preserve into the IWR. This unique coastal wetland ecosystem doubled the size of the IWR.

Gard Island: In 2006, the University of Toledo signed a cooperative management agreement with the U.S. Fish and Wildlife Service to add the 17-acre Gard Island into the IWR. Key goals are to protect this unique

island habitat for wildlife and for research and environmental education.

Coastal Wetlands at the Mouth of Swan Creek: In 2006, the Migratory Bird Conservation Commission awarded \$149,068 in funding to help acquire unique coastal wetland and upland habitats at the mouth of Swan Creek in Monroe County. Additional monies will be coming from the Land and Water Conservation Fund and a North American Wetlands Conservation Act grant.

Lake Erie Metro Park: During 2006, 780 acres of unique coastal wetlands, meadows, lagoons, and other habitats were added through a cooperative management agreement with Huron-Clinton Metropolitan Authority. This park is one of the top places to watch hawks in North America and is home to the annual HawkFest.

Research and Monitoring

International Association for Great Lakes Research: In 2006, a special, one-day session on the IWR was convened at the Annual Meeting of the International Association for Great Lakes Research.

Indicator Project: During 2006, the U.S. Fish and Wildlife Service, Environment Canada, U.S. Environmental Protection Agency, and many other partners continued their work on the Detroit River-Western Lake Erie Indicator Project. This topic of status and trends of key indicators was also the focus of the State of the Strait Conference in December 2006. See link for more information: www.epa.gov/medgrosseile_site/indicators/index.html

Huron Erie Corridor Initiative: In 2006, the U.S. Geological Survey's Great Lakes Science Center partnered with U.S. Fish and Wildlife Service and many other agencies to address high priority research needs for the Huron-Erie corridor.

Lake Whitefish Reproduction: In 2005, U.S. Geological Survey and U.S. Fish and Wildlife Service found 62 whitefish larvae in the lower Detroit River, confirming natural reproduction of whitefish for the first time since 1916. In 2006, an event was held to symbolically release of whitefish fry into the river.

Rockwood Christmas Bird Count: In 2006, the Rouge River Bird Observatory and Detroit Audubon added another year to the 30-year Rockwood Christmas Bird Count database. See link for more information: www.umd.umich.edu/dept/rouge_river/rockwoodcbc.html

Migratory Bird Stopover Sites: In 2006, The Nature Conservancy and many partners continued their work on compiling and synthesizing information necessary for protection and restoration of migratory bird stopover sites in western Lake Erie.

Mussel Survey: In 2006, a total of 13 species were found during the mussel surveys performed by the Michigan Natural Features Inventory at 14 sites within the Detroit River IWR.

Breeding Bird Survey: In 2006, another breeding bird survey was completed in Humbug Marsh by the Rouge River Bird Observatory. In total, 66 species were identified; ranging from Cerulean Warbler and Ovenbird to the Indigo Bunting. See link for more information: www.umd.umich.edu/dept/rouge_river/DRIWR_NAMC_2006.html

Grassy Island: In 2006, the U.S. Army Corps of Engineers completed a visual dike inspection. A plant survey resulted in over 100 different species identified. A 2006 bird/insect survey recorded 23 different bird species on or adjacent to Grassy Island. A sediment survey is underway. See link for more information: www.fws.gov/midwest/grassyisland



Common Tern: In 2006, research on the Detroit River common tern colonies at the Grosse Ile Free and Toll Bridges monitored the level of contaminants, such as PCBs, in common tern eggs. The eggs are collected and processed at the U.S. Fish and Wildlife Service lab, and sent to Great Lakes Institute for Environmental Research for analysis.

Fisheries Survey: In 2006, a comprehensive fishery survey was performed by Michigan Department of Natural Resources, U.S. Geological Survey, and U.S. Fish and Wildlife Service in the Detroit River and western Lake Erie.

Herpetological Survey: During 2006, 17 reptile and amphibian species were documented during a survey on Calf Island, Mamajuda Shoal, Mud Island, Brancheau Unit, Eagle Island Marsh, Berenholz Unit, and Grassy Island. Recorded were Eastern Fox Snake,

Leon Carl of USGS,
Congressman Conyers,
Senator Levin,
Congressman Dingell,
Wayne County
Executive Ficano, and
John Hartig of IWR
celebrate whitefish
release into the
Detroit River

Photo Credit:
U.S. Geological Survey

Spotted Map Turtles, Northern Brown Snake, Leopard Frogs, and various other reptiles and amphibians. Partners included: Herpetological Resource and Management, Friends of the Detroit River - River Keeper Program, Monroe County Planning GIS Department, Wayne County Emergency Management Division – GIS.



Kayaking during 2006 Paddle By Your Refuge.
Photo Credit: Janis Lane



Hamilton Anderson Associates rendering of Water Trail Map

Dragon Fly Survey: During 2006, 32 species of dragonfly were found at Humbug Marsh by Rouge River Bird Observatory. Two of the dragonflies found are listed as “Special Concern Species” in Michigan: Russet-tipped Clubtails and Elusive Clubtail.

Community Engagement

Wayne County Parks completed the schematic phase of architectural design for the Refuge Gateway in Trenton with \$100,000 from DTE Energy Foundation and \$50,000 from Kresge Foundation.

Wild Birds Unlimited, Inc. Pathways to Nature Program granted \$100,000 for a bird driving tour in the IWR.

The Community Foundation for Southeast Michigan’s Greenways Initiative awarded \$75,000 for greenway trails in Humbug Marsh.

Over 350 people attended the International Wildlife Refuge Alliance annual dinner in April 2006, including Congressman John Conyers, Governor Jennifer Granholm, and Canadian Member of Parliament Jeff Watson, that raised over \$100,000 for IWR work.

Over 250 kayakers participated in another successful Paddle By Your Refuge event in September 2006. Metropolitan Affairs Coalition and many partners completed a regional canoe and kayak plan called the Detroit Heritage River Water Trail.

The State of the Strait Conference was held in December 2006. Over 300 people participated in evaluating long-term trends of key indicators.

Numerous refuge presentations were made to raise awareness and build support. Presentations were made to: Detroit Riverfront Conservancy, Southeast Michigan Council of Governments, Allen Park Kiwanis Club, Michigan Sea Grant Great Lakes Conference, Detroit Science Center, Western Lake Erie Conference, Southern Wayne County Chamber of Commerce, Erie Hunting and Fishing Club, and the National Wetlands Conference.

Detroit River IWR participated in the annual HawkFest at Lake Erie Metro Park in September 2006 that attracted 6,400 people.

Detroit River IWR participated in the Waterfowl Festival at Pointe Mouillee State Game Area in September 2006 that attracted over 9,000 people.

Two Grassy Island Forums were held during 2006 to provide an update on investigation and cleanup efforts at Grassy Island.

Nearly 150 people joined The Nature Conservancy in October 2006 to celebrate the addition of Erie Marsh in the Detroit River IWR on a Detroit River cruise aboard the Diamond Queen.

Detroit River IWR was featured on FLW Outdoors during the 2006 walleye tournament hosted on the Detroit River – over \$500,000 in prize money was awarded.

Another successful cleanup of Humbug Marsh was organized by Friends of the Detroit River, Downriver Stream Teams, and many other volunteers.

Over 100 people attended an October 2006 celebration of the

symbolic release of whitefish into the Detroit River, celebrating the ecological recovery of the Detroit River. This was the first time since 1916 that whitefish reproduction has been found in the Detroit River.

Capacity Building

One of the major goals of the U.S. Fish and Wildlife Service is to build the capacity to deliver its mission for the Detroit River IWR. In October 2005 the International Wildlife Refuge Alliance was established. The Alliance’s mission is “to support the first International Wildlife Refuge in North America by working through

partnerships to protect, conserve, and manage the refuge’s wildlife and habitats, and to create exceptional conservation, recreational and educational experiences to develop the next generation of conservation stewards.”

Both the IWR and Alliance have experienced much growth. The Alliance completed their first strategic planning retreat in 2006 with a blueprint to guide short-term action through a strategic vision. One goal of the Alliance was the hiring of the Executive Director. The Alliance Board of Directors



Sharp-Shinned Hawk
Photo Credit: U.S. Fish and Wildlife Service

expanded from 10 to 16 trustees. The board members include: Mr. George Mans (Chairperson), Ms. Anita Twardesky (Vice Chairperson), Ms. Mary Bohling (Secretary), Mr. Dick Micka (Treasurer), Dr. Bruce Jones, Mr. Dick Whitwam, Mr. Lloyd Semple, Ms. Molly Luempert-Coy, Mr. Randy Hicks, Ms. Andrea Kline, Dr. Jim Bull, Mr. Steve Sczytko, Ms. Yvette Pugh, Mr. Bruce Szczechowski, Mr. Tim Bowman, and Mr. Richard Tuzinsky.

During 2006, Ms. Emily Wilke of the University of Michigan continued to provide support to the Detroit River-Western Lake Erie Indicator Project and to help organize the successful State of the Strait Conference. Ms. Kay Morrison continued to serve as webmaster for the indicator project under support from U.S. Environmental Protection Agency.

Other university students involved in

indicator work included: Ms. Guadalupe Cummins and Ms. Lena Cicchelli of Wayne State University. In 2006, Ms. Janae Reneaud was awarded the Metropolitan Affairs Coalition-Detroit River IWR Fellowship to oversee volunteer construction of a wildlife observation deck in Humbug Marsh and to help develop a bird driving tour map for the region. Mr. Gregory Norwood was hired as a part-time, biological technician in the fall of 2006 with support from U.S. Environmental Protection Agency to complete the indicator project in 2007. Metropolitan Affairs Coalition continued to provide grant writing support for proposed projects common to the Greater Detroit American Heritage River Initiative and the Detroit River IWR. Finally, U.S. Environmental Protection Agency's Large Lakes Research Station continued to provide office space and support for refuge staff.



What's Next

The Detroit River IWR will continue to grow through public-private partnerships.

Key priorities for 2007 include:

- Initiating a capital campaign for the Refuge Gateway
- Building trails in Humbug Marsh Unit with funding from U.S. Department of Transportation and Community Foundation for Southeast Michigan
- Daylighting Monguagon Creek at the Refuge Gateway and restoring the natural flow to the Monguagon Delta
- Dedicating the wildlife observation deck at Humbug Marsh on Migratory Bird Day – May 12, 2007
- Undertaking invasive species management at Humbug Marsh
- Developing a bird driving tour map for the IWR and region
- Completing the Detroit River-Western Lake Erie Indicator Project by December 2007
- Initiating a cooperative management agreement for unique habitats at CMS Energy in Monroe County
- Pursuing high priority land acquisitions in Monroe and Wayne Counties
- Updating the refuge website
- Completing Grassy Island Remedial Investigation/Feasibility Study by December 2007

U.S. Fish and Wildlife Service
International Wildlife Refuge Alliance

Website:
www.fws.gov/midwest/detroitriver/index.html

Acknowledgements

Many individuals, organizations, corporations, and agencies have contributed significantly to the accomplishments highlighted in this annual report and to building our IWR. Without this broad-based involvement and support the vision of a world-class refuge in the industrial heartland would not be possible. Special thanks are extended to Durwood Coffey for providing the design and layout of this annual report. The printing of this report was courtesy of DTE Energy. We all should be very proud of what we are accomplishing.



- Celebrating shoreline restoration at Black Lagoon in 2007
- Completing the North American Wetlands Conservation Act grant – restoration at Lagoona Beach Unit and acquisition of Swan Creek property
- Securing funding for a sturgeon spawning reef off Fighting Island
- Carrying out another Alliance fund raiser in spring 2007
- Coordinating refuge educational/outreach activities like Paddle By Your Refuge in September 2007, a FLW Outdoors Fishing Tournament in July 2007, and annual events like HawkFest, Pointe Mouillee Waterfowl Festival, and a Lotus Tour with the Monroe Garden Club

Scientists from the
U.S. Fish and Wildlife
Service and U.S.
Geological Survey
catching a Detroit
River Sturgeon

Photo Credit:
Mark Houston
from DTE Energy

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